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# Anti-POLR3C Antibody

Catalog # AP59802

## Product Information

| | |
|---|---|
| **Application** | WB |
| **Primary Accession** | Q9BUI4 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 60612 |

## Additional Information

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| **Gene ID** | 10623 |
| **Other Names** | DNA-directed RNA polymerase III subunit RPC3; RNA polymerase III subunit C3; DNA-directed RNA polymerase III subunit C; RNA polymerase III 62 kDa subunit; RPC62 |
| **Target/Specificity** | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human POLR3C. The exact sequence is proprietary. |
| **Dilution** | WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100) |
| **Format** | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

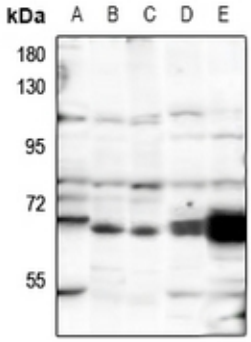
## Protein Information

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|---|---|
| **Name** | POLR3C ( HGNC:30076) |
| **Function** | DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the four ribonucleoside triphosphates as substrates (PubMed:20413673, PubMed:33558764, PubMed:33558766, PubMed:34675218, PubMed:35637192). Specific peripheric component of RNA polymerase III (Pol III) which synthesizes small non-coding RNAs including 5S rRNA, snRNAs, tRNAs and miRNAs from at least 500 distinct genomic loci (PubMed:20413673, PubMed:33558764, PubMed:33558766, PubMed:35637192). Part of POLR3C/RPC3-POLR3F/RPC6-POLR3G/RPC7 heterotrimer, coordinates the dynamics of Pol III stalk and clamp modules during the transition from apo to elongation state (PubMed:33558764, PubMed:33558766). Pol III plays a key role in sensing and limiting infection by intracellular bacteria and DNA viruses. Acts as a nuclear and cytosolic DNA sensor involved in innate immune response. Can sense non-self dsDNA that serves as template for transcription into dsRNA. The non-self RNA polymerase |

III transcripts, such as Epstein-Barr virus-encoded RNAs (EBERs) induce type I interferon and NF-kappa-B through the RIG-I pathway (PubMed:19609254, PubMed:19631370). Preferentially binds single-stranded DNA (ssDNA) in a sequence-independent manner (PubMed:21358628).

**Cellular Location** Nucleus.

## Images




Western blot analysis of POLR3C expression in CT26 (A), PC12 (B), Hela (C), COS7 (D), A549 (E) whole cell lysates. (Predicted band size: 60 kD; Observed band size: 61 kD)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.